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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,644	10/23/2003	Katsuhiko Yoshida	244230US-2S CONT	9147
22850	7590	02/07/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			NGUYEN, CHAU N	
			ART UNIT	PAPER NUMBER
			2831	

DATE MAILED: 02/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/690,644

**Applicant(s)**

YOSHIDA ET AL.

**Examiner**

Chau N. Nguyen

**Art Unit**

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-8 and 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori et al. (6,242,825) in view of Igashira et al. (4,471,256).

Mori et al. discloses a coil for an electric rotating machine (Fig. 4) comprising a conductor configured by bundling a plurality of square strands and stacking the square strands like a coil with Roebel transposition, a mica tape (Fig. 5) which is wound a plurality of layers around on an outer surface of the conductor and made up a mica paper (31) and a cloth backing material (32), an insulation layer (30) formed with impregnating and curing resin (col. 7, lines 51-55) between the wound layers of the mica tape, and inorganic particles (col. 8, lines 1-9) supported with the mica tape.

Mori et al. does not specifically disclose an adhesive containing a glue insoluble in the impregnated resin being used to support the particles with the mica tape (re claims 1, 2, 13, 16). Igashira et al. discloses an invention relating to an electric machine. Igashira et al. discloses a compound includes particles and an adhesive containing a glue which is polyvinyl alcohol (re claims 3, 5, 7, 8, 11, 12, 14, 15, 17 and 18). It would have been obvious to one skilled in the art to use the adhesive as taught by Igashira et al. to bond the inorganic particles of Mori et al. to the mica tape.

Mori et al. also discloses the inorganic particles including aluminum nitride (re claim 6), aluminum oxide (re claims 14 and 17), or boron nitride

(re claims 15 and 18). Re claims 4, 5, 8 and 12, it would have been obvious to one skilled in the art to choose a suitable amount of polyvinyl-based polymer or polyvinyl alcohol in the adhesive, including 0.5wt% to 5wt%, to meet the specific use of the resulting tape since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable range involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

4. Claims 1, 2, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori et al. (6,242,825) in view of Ishimatsu (2001/0030022).

Mori et al. discloses the invention substantially as claimed in claims 1 and 2 except for an adhesive containing a glue, which is polyvinyl acetal and which is insoluble in the impregnated resin (re claims 1, 2, 9 and 10), being used to support the particles with the mica tape.

Ishimatsu discloses an adhesive material containing a glue which is polyvinyl acetal (see table 1 and claim 5 of Ishimatsu). It would have been obvious to one skilled in the art to use the adhesive as taught by Ishimatsu to bond or to support the inorganic particles of Mori et al. to the mica tape.

Re claim 10, it would have been obvious to one skilled in the art to choose a suitable amount of polyvinyl-based polymer or polyvinyl alcohol in the adhesive, including 0.5wt% to 5wt%, to meet the specific use of the resulting tape since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable range involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1, 2, 9 and 10 have been considered but are moot in view of the new ground(s) of rejection.

### ***Communication***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N. Nguyen whose telephone number is 571-272-1980. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-2800

ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Chau N Nguyen  
Primary Examiner  
Art Unit 2831